REMARKS/ARGUMENTS

The present response is intended to be fully responsive to the rejection raised in the Office action, and is believed to place the application in condition for allowance. Further, the Applicants do not acquiesce to any portion of the Office Action not particularly addressed. Favorable reconsideration and allowance of the application is respectfully requested.

In the Office action, the Office noted that claims 1-5 are pending and rejected. Applicants, respectfully, traverse the rejection and submit that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. § 103. Thus, Applicants believe that all of these claims are in condition for allowance.

REJECTION

Applicant's Response to the 35 U.S.C. § 103(a) Rejection of claims 1-5

The Office rejected claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,446,495 issued to Tourtier et al. (hereon after *Tourtier*) in view of U.S. Patent Publication No. 2003/0185450 published to Garakani et al. (hereon after *Garakani*) further in view of U.S. Patent No. 5,321,771 issued to Burel et al. (hereon after *Burel*).

In the Office Action, the Office insinuated that the combination of *Tourtier*, *Garakani* and *Burel* discloses all the elements recited in claim 1. In support of the rejection, the Office indicated that "[i]t would have been obvious at the time the invention was made to one of ordinary skill in the art to modify *Tourtier*'s teaching of correlation to find a vector with *Garakani*'s teaching of finding a vector using autocorrelation [and] modify *Garakani*'s autocorrelation with *Burel*'s modified autocorrelation...." *Office Action*, at page 5 and 6. Applicants respectfully disagree.

Claim 1 recites a combination of elements directed to a method of image filtering. The combination of elements includes "(a) computing a modified auto-correlation in a first direction for each pixel in an image; (b) filtering said image with a lowpass filter; and (c) interpolating said image and said filtered image from step (b) wherein said interpolating at said each pixel depends upon said modified auto-correlation in a first direction."

Applicants agree with the Office that Tourtier "does not teach the claimed 'modified auto-correlation'...." *Office Action*, at page 4. *Tourtier* discloses "a

television signal sub-band coder/decoder with various levels of compatibility."
Tourtier, at Col. 1 lines 8-11. *Tourtier* further discloses "interpolation filters to interpolate the pixels in each sub-band by taking into account information contained in the adjacent sub-bands." *Id.* at Col. 4 lines 9-11. Moreover, *Tourtier* teaches "essentially the sub-bands adjacent to a sub-band under consideration which contribute most to the interpolation of the sub-band under consideration and that the contributions from the other sub-bands may be considered negligible." *Id.* at Col. 7 lines 9-13. Therefore, *Tourtier* is devoid from disclosing the combination of elements of claim 1, directed to "interpolating said image and said filtered image from step (b) wherein said <u>interpolating at said each pixel depends upon said modified auto-correlation in a first direction</u>." [Emphasis added].

Similarly, Applicants agree with the Office that the combination of *Tourtier* and *Garakani* "still does not teach the claimed invention 'modified auto-correlation'." *Office Action*, at page 5. More specifically, *Garakani* discloses "methods and apparatus for measuring self-similarity in spatiotemporal signals to characterize, adaptively control acquisition and/or storage, and assign meta-data for further detail processing." *Garakani*, at Abstract. *Garakani* is also devoid from teaching or suggesting the combination of elements of claim 1, directed to "interpolating said image and said filtered image from step (b) wherein said <u>interpolating at said each pixel depends upon said modified auto-correlation in a first direction</u>." [Emphasis added]. Hence, the *Tourtier* and *Garakani*, alone and in combination, do not teach or suggest Applicants' inventive concept of claim 1.

Burel discloses "comprises a data processor <u>associated with a network of automata</u> organized in three levels; the inputs of each of the automata are weighted by adjustable coefficients; the number of automata of the first level is equal to the number of characteristic values computed from observation windows taken firstly in a set of examples of image zones having different textures." *Burel*, at Abstract. [Emphasis added]. *Burel* also discloses "modified autocorrelation functions which were computed for this <u>example of a given texture</u> are applied to the inputs of the network...." *Id.* at Col. 4 lines 29-44. Therefore, *Burel* is devoid from teaching or suggesting the combination of elements of claim 1, directed to "interpolating said image and said filtered image from step (b) wherein said <u>interpolating at said each pixel depends upon said modified auto-correlation in a first direction</u>." [Emphasis

added]. Hence, *Tourtier*, *Garakani* and *Burel*, alone and in combination, are devoid from teach or suggesting Applicants' inventive concept of claim 1.

As a result, Applicants submit that, at the time Applicant's invention was made, it would not have been obvious to one of ordinary skill in the art "to modify *Tourtier*'s teaching of correlation to find a vector with *Garakani*'s teaching of finding a vector using autocorrelation [and] modify *Garakani*'s autocorrelation with *Burel*'s modified autocorrelation" to teach "interpolating said image and said filtered image from step (b) wherein said <u>interpolating at said each pixel depends upon said modified auto-correlation in a first direction</u>." [Emphasis added]. Therefore, Applicants submit that *Tourtier*, *Garakani* and *Burel*, alone and in combination, do not teach or suggest all the elements recited in claim 1.

Claims 2-5, depend, directly or indirectly, from independent claim 1 and necessarily include all the limitations of claim 1. Since Applicants submit that *Tourtier*, *Garakani* and *Burel*, alone and in combination, do not teach all the elements of claim 1, Applicants also submit that *Tourtier*, *Garakani* and *Burel*, alone and in combination, do not teach all the elements of claims 2-5. Thus, Applicants submit that claims 1-5 meet the requirements of 35 U.S.C. § 103(a) and are in condition for allowance. Applicants respectfully request reconsideration and withdrawal of the rejection to claims 1-5.

CONCLUSION

In view of the foregoing, the Applicants submit that none of the claims presently in the application are obvious under the provisions of 35 U.S.C. § 103(a). Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Office believes that any unresolved issues still exist or if, in the opinion of the Office, a telephone conference would expedite passing the present application to issue, the Office is invited to call the undersigned attorney directly at 972-917-4365 or the office of the undersigned attorney at 972-917-0995 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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